

1. An optical connector assembly comprising:
  - a) an optical connector comprising a plurality of connector elements, each of the connector elements having a mating face with an opening therein; and
  - 5           b) a cover comprising a plurality of like modules coupled together, each of the modules having a portion covering the opening of a front mating face of a connector element.
2. The optical connector assembly of claim 1 wherein the dust cover  
10 comprises at least one second type module, different from said plurality of like modules, the second type module having features thereon for latching to the optical connector.
3. The optical connector assembly of claim 1 wherein each of the plurality of  
15 connector elements includes a shutter.
4. The optical connector assembly of claim 1 wherein each of the modules has opposing sides with complementary engagement features formed on the opposing sides.
5. The optical connector assembly of claim 4 wherein the engagement  
20 features comprise holes and projections with the projections of one module aligned to engage holes in an adjacent module when the modules are placed side-by-side.
6. The optical connector assembly of claim 1 wherein the optical connector  
25 is a backplane connector in an electronic assembly.
7. The optical connector assembly of claim 1 wherein the optical connector additionally comprises a support member to which the connector elements are attached and each of the cover modules forms an interference fit with the support member.
8. The optical connector assembly of claim 1 wherein the optical connector  
30 is mounted in the backplane of an electronics system of the type that receives a plurality of daughter cards of predetermined size characteristics, the assembly further comprising

a dummy board having the size characteristics of a daughter board, wherein the cover is mounted to the dummy board.

9. The optical connector assembly of claim 8 wherein the cover is mounted  
5 to the dummy board through a compliant mount.

10. The optical connector assembly of claim 1 additionally comprising a gasket encircling the plurality of connector elements.

10 11. An optical connector assembly comprising:  
a) at least one optical fiber having a mating end;  
b) a first member having a surface with the mating end of the optical  
fiber exposed therein;  
c) a second member coupled to the first member; and  
15 d) an adhesive substance positioned between the second member and  
the surface of the first member.

12. The optical connector assembly of claim 11 wherein the adhesive  
substance comprises a gel-pack.  
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13. The optical connector assembly of claim 12 wherein the adhesive  
substance comprises a plurality of gel packs.

14. The optical connector assembly of claim 11 wherein the first member is  
25 enclosed within a connector housing, the connector housing having a compressible face  
and a shutter actuated by compression of the compressible face, wherein the second  
member comprises a latching member whereby the connector housing may be latched  
with the compressible face against the adhesive substance.

15. The optical connector assembly of claim 14 additionally comprising a  
30 gasket encircling the connector housing.

16. The optical connector of claim 11 wherein the first member is a ferrule.
17. The optical connector assembly of claim 11 cleaned according to the method of:
- 5 a) pressing the second member towards the first member until the adhesive substance engages the mating end of the first member;
- b) removing the second member; and
- c) coupling the first member to a second optical connector.
- 10 18. The optical connector of claim 11 wherein the adhesive substance is a ring.
19. The optical connector of claim 11 wherein the adhesive substance is a pad.
- 15 20. The optical connector of claim 11 wherein the adhesive substance comprises a plurality of separable, stacked adhesive members.
21. The optical connector of claim 20 wherein each of the adhesive members has a backing including a non-adhesive tab.
- 20 22. The optical connector of claim 11 wherein the adhesive substance contacts the mating end of the optical fiber.
23. The optical connector of claim 21 wherein the second member is a protective cover.
- 25 24. The optical connector of claim 23 used according to the method of:
- a) removing one of the separable members to expose a clean surface of a second separable member; and
- 30 b) installing the protective cap on the connector with the clean surface contacting the mating end of the optical fiber.

25. A tool for inserting a protective cover having an engagement feature on an optical connector within an electronic assembly, comprising:

- a) a handle;
- b) an engagement region attached to the handle, the engagement  
5 region comprising:
  - i) a first side wall and an opposing second side wall;
  - ii) a unidirectional latch member for engaging the  
engagement feature of the protective cover, the unidirectional  
latch member extending from the first side wall;
  - 10 iii) wherein the second side wall is free of a member that  
engages the engagement feature.

26. The tool of claim 25 wherein the engagement region comprises a plurality  
of like modules.

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27. The tool of claim 25 wherein the engagement region comprises:

- a) a metal support member;
- b) an insulative region including the first side wall and the second  
side wall and further including skirts overlaying the metal support  
20 member whereby the metal support member is insulated from the  
electronic assembly.

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28. The tool of claim 25 used in a method of cleaning an optical connector,  
comprising:

- 25 a) providing a protective cover having an engagement feature and a  
face having an adhesive surface;
- b) mounting the protective cover in the engagement region, with the  
engagement feature facing the first side wall;
- c) using the handle to push the adhesive portion of the protective  
30 cover into contact with an optical connector in the electronic assembly.

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29. The method of claim 28 additionally comprising using the tool to mount and remove protective covers from optical connectors within electronic assemblies.

30. The optical connector assembly of claim 25 additionally comprising a  
5 conductive support member mounted to the handle, wherein the engagement region comprises at least one insulative member attached to the conductive support member.

31. The optical connector assembly of claim 30 wherein the at least one  
10 insulative member includes an insulative skirt covering the conducting member.

32. The optical connector assembly of claim 31 wherein the at least one  
insulative member comprises a plurality of like modules.

33. An optical connector assembly comprising:  
15 a) an optical connector comprising a plurality of connector elements aligned side-by-side, each of the connector elements having a housing with a mating face having an opening therein; and  
b) a cover comprising a plurality of like modules, each of the  
modules having a cover portion covering the opening of a front mating  
20 face of a connector element, each of the like modules having arms extending from the cover portion and engaging the housing.

34. The optical connector assembly of claim 33 wherein the cover modules  
25 are C-shaped.

35. The optical connector assembly of claim 33 wherein the housing of each  
module is compressible and compressing the housing actuates a shutter that covers the  
mating end of an optical fiber and the arms engage the housing when the housing is in a  
compressed state.

36. The optical connector assembly of claim 35 wherein the cover  
30 additionally comprises an adhesive member on the cover portion.

37. The optical connector assembly of claim 36 wherein the adhesive member comprises a plurality of separable adhesive pads.

5           38. The optical connector assembly of claim 37 wherein each of the plurality of adhesive members has a tab extending therefrom, providing a mechanism to remove a pad.

10           39. The optical connector assembly of claim 33 additionally comprising a projection from the cover portion extending away from the front mating face.

40. The optical connector assembly of claim 39 wherein optical connector assembly is mounted to a daughter card for an electronic assembly, the electronic assembly includes a force generating apparatus that can be actuated to seat a daughter  
15 card in a backplane and the projection holds the daughter card sufficiently far from the backplane that it does not engage the force generating apparatus.

41. The optical connector assembly of claim 33 wherein each of the cover modules latches to the connector housing.  
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42. The optical connector assembly of claim 33 wherein each of the cover modules engages the connector housing with a friction fit.

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